

AMENDMENTS TO THE ABSTRACT:

Please replace the paragraph (Abstract) beginning at page 24, line 1 with the following rewritten version:

ABSTRACT

A scroll fluid machine includes a stationary scroll (~~21~~) having a spiral wrap (~~24~~) formed on an end plate (~~23~~) and a moving scroll (~~22~~) having a spiral wrap (~~24~~) formed on an end plate (~~23~~). A polymer actuator (~~40~~) for adjusting the amount of space between the wrap (~~24~~) and the end plate (~~23~~) is disposed in a recess formed at ~~the~~ a tip of the wrap (~~24~~). The polymer actuator (~~40~~) changes its shape along ~~the~~ a height of the wrap (~~24~~) to adjust ~~the~~ an amount of the space. The polymer actuator (~~40~~) also functions as a seal between the end plate (~~23~~) and the wrap (~~24~~). The recess is formed such that a wall of the recess including an inner circumference surface of the wrap (~~24~~) has a thickness different from that of a wall of the recess including an outer circumference surface of the wrap (~~24~~).